

MOSS v. BALLARD
CASE NO. 2:09cv01406

RESPONDENT'S EXHIBIT 33
(Continuation, pp. 63 - to appendix [Bing])

IN THE CIRCUIT COURT OF KANAWHA COUNTY, WEST VIRGINIA

JOHN MOSS, III,

Petitioner,

v.

Civil Action No. 94-MISC-663

GEORGE TRENT, Warden of the
West Virginia State Penitentiary,

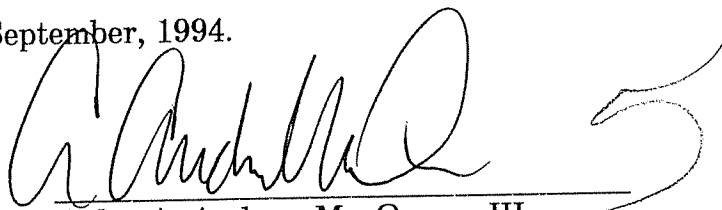
Respondent.

ORDER

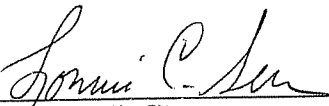
After considering **PETITIONER'S MOTION FOR ALL DOCUMENTS RELATING TO ANY TESTING PERFORMED IN CONNECTION WITH THIS CASE OR IN CONNECTION WITH PAUL REGGETTZ, III**, and noting no objection from Respondent, the Court does hereby **ADJUDGE, ORDER, and DECREE** that the motion is granted and that Respondent is ordered to produce to Petitioner any and all documents, including but not limited to laboratory notes, work sheets, and any other raw data, relating to any testing performed in connection with Petitioner's case or in connection with the case against Paul Reggett, III.

The Clerk is ordered to mail a certified copy of this **ORDER** to all counsel of record.

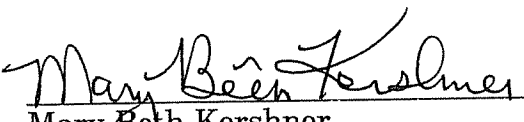
ENTERED this 15th day of September, 1994.


Judge A. Andrew MacQueen, III

Inspected by:



Lonnie C. Simmons
DI TRAPANO & JACKSON
604 Virginia Street, East
Charleston, West Virginia 25301
(304) 342-0133



Mary Beth Kershner
Assistant Prosecuting Attorney
Kanawha County Judicial Court Annex Bldg
111 Court Street
Charleston, West Virginia 25301
(304) 357-0300

Contract for
Date

PT-E, -51

100-448025
 100-448025
 100-448025

STAINS OF HUMAN BLOOD, GROUP O, CONTAINING THE R-1 VARIANT OF THE POLYMORPHIC ISOENZYME PHOSPHOGLUCOMUTASE (PGM R-1), THE I VARIANT OF THE POLYMORPHIC ISOENZYME ADENYLATE KINASE (AK I), THE O VARIANT OF THE POLYMORPHIC ISOENZYME ERYTHROCYTIC ACID PHOSPHATASE (EAP^O), THE I VARIANT OF THE POLYMORPHIC ISOENZYME ESTERASE D (EAD I), THE I VARIANT OF THE POLYMORPHIC ISOENZYME ADENOSINE DEAMINASE (ADA I), AND THE I VARIANT OF THE POLYMORPHIC ISOENZYME GLUCALASE I (GLO I 2) WERE IDENTIFIED ON ITEMS "1-G, "8, AND "13 RECOVERED FROM THE SCENE, ON THE NIGHT GOWN OF VANESSA REEDER, AND ON THE DOLL.

HUMAN BLOOD, GROUP O, PGM R-1, AND EAD I WAS IDENTIFIED ON ITEM "16 FROM THE SCENE.

HUMAN BLOOD, GROUP O, AND PGM R-1 WAS IDENTIFIED ON ITEM "9 FROM THE SCENE.

HUMAN BLOOD CONTAINING EAD I WAS IDENTIFIED ON THE KNIFE.

NO ADDITIONAL BLOOD GROUPINGS COULD BE OBTAINED FOR THE ABOVE THREE ITEMS DUE TO THE QUANTITY OR CONDITION OF THE BLOOD PRESENT.

STAINS OF HUMAN BLOOD, GROUP O, PGM R-1, AK I, EAP^O, EAD I, AND GLO I 2 WERE IDENTIFIED ON THE SCENE.

THE BLOOD SPECIMEN OF PAUL ERIC RECKETT
 WAS OF HUMAN BLOOD GROUP O, PGM 311-
 AK1, SAP^B, EAD 1, ADA 1, GLO 2,
 Hp 2-1, AND Gc 2-1.

THE BLOOD SPECIMEN OF PAUL RECKETT III
 WAS OF HUMAN BLOOD GROUP O, PGM 315-
 AK1, SAP^{BA}, EAD 1, ADA 1, GLO 2,
 Hp 2, AND Gc 2-1.

THE BLOOD SPECIMEN OF JOHN HARRIS WAS
 OF HUMAN BLOOD GROUP O, PGM 1-1-
 AK1, SAP^{BA}, EAD 2-1, ADA 1, GLO 2,
 Hp 2-1, AND Gc 1.

OF THE BLOOD SPECIMENS FROM NEAL,
 PROVINCE, MONK, GILLESPIE, SMITH, ROLLINS,
 HARRIS, BROWN, AND WHITE, NONE WAS
 FOUND TO CONTAIN EAD 2-1.

NO BLOOD STAINS WERE IDENTIFIED ON
 ANY OF THE ARTICLES OF CLOTHING
 SUBMITTED, OTHER THAN THOSE PREVIOUSLY
 REPORTED.

NO BLOOD STAINS WERE IDENTIFIED ON
 THE BASE OF STAINLESS PLATE.

CONCL.

GROUPINGS OF THE HUMAN BLOOD STAINS IDENTIFIED ON ITEMS #1-6, #8, AND #13 FROM THE SCENE, ON THE NIGHT GOWN OF VANESSA REGGETTE, AND ON THE DOLL WERE CONSISTENT WITH THE GROUPINGS OF VANESSA REGGETTE'S BLOOD AND WITH THE GROUPINGS OF PAUL ERIC REGGETTE'S BLOOD.

GROUPINGS OF THE HUMAN BLOOD STAINS ON ITEMS #9 AND #16 FROM THE SCENE WERE CONSISTENT WITH THE GROUPINGS OF VANESSA REGGETTE'S BLOOD AND PAUL ERIC REGGETTE'S BLOOD TO THE EXTENT THAT BLOOD GROUPINGS COULD BE DETERMINED.

GROUPINGS OF THE HUMAN BLOOD STAINS IDENTIFIED ON ITEMS #7, #11, #12, #14, AND #15 FROM THE SCENE, ON THE CHRISTMAS PACKAGE AND WRAPPING PAPER, ON THE FLASHLIGHT, AND ON THE CLOTHING OF BERNADETTE REGGETTE WERE CONSISTENT WITH THE GROUPINGS OF JOHN MOSS AND WERE NOT CONSISTENT WITH THE GROUPINGS OF ANY OF THE OTHER BLOOD SPECIMENS EXAMINED. THE COMBINATION OF BLOOD GROUPS OF

PEM 1-1-1, AE 1, EAF 0A, EAD 2-1, ADA 1, SIO 1-2, HA 2-1, AND GALL 1 GROUPS

WAS CONSISTENT WITH THE BLOOD GROUPS OF JOHN MOSS.

FROM THE SCENE, ON THE CHRISTMAS PACKAGE
AND WRAPPING PAPER, ON THE FLASHLIGHT,
AND ON THE CLOTHING OF BERNADETTE RECKETT.

IN ADDITION, THE STAINS ON ITEM #7 FROM
THE SCENE, THE STAINS ON THE CHRISTMAS
PACKAGE WRAPPING PAPER, AND THE STAINS
ON THE CLOTHING OF BERNADETTE RECKETT
WERE ^{FOUND} ~~REPORTED~~ TO CONTAIN THE Z-1
VARIANT OF THE POLYMORPHIC SERUM PROTEIN
HAPToglobulin (Hp Z-1), THE 1 VARIANT OF
THE ^{POLYMORPHIC} SERUM PROTEIN GROUP SPECIFIC
COMPONENT (Gc 1), AND THE PGM 1
WAS ^{AND FOUND TO BE A} ~~SUBGROUPED AS A PGM 1+1-~~

BLOOD STAINS WERE WAS IDENTIFIED
ON ITEMS #10 AND #17 FROM THE SCENE
BUT NO ADDITIONAL INFORMATION COULD BE
OBTAINED.

THE BLOOD SPECIMEN OF VANESSA RECKETT
WAS OF HUMAN BLOOD GROUP O, PGM 2+1-,
Sf 1, SGE B, E+P-1, ABO 1, GLO 2,
Hp 1, AND Gc Z-1.

THE BLOOD SPECIMEN OF BERNADETTE RECKETT
WAS OF HUMAN BLOOD GROUP O, PGM 2+1-,

DEPARTMENT OF PUBLIC SAFETY
(Criminal Identification Bureau)

CASE SUBMISSION REPORT

Your Case No. _____ C.I.B. CASE NO. 79-7566 A

From: S. Police Location: So. Charleston Date: 12/14/1979
(Organisation) (City)

Submitted By: M. D. Smith Rank: Thompson

Subject of Investigation: Murder

Place of Crime: St Albans area Kanawha
(Town) (County)

Date of Crime: 12/13/79 19 79 Time: _____ A.M. or P.M., E.S.T. or D.S.T.

Name of Victim: Vanessa Riggerty DOB: _____ Color: W Sex: M

Address: 7027 Chestnut Ave, St Albans

Suspect or Accused: Bruce Riggerty DOB: _____ Color: W Sex: M

Mt. _____ Wt. _____ Criminal History: Not Known Fingerprinted: Yes

Address: 7027 Chestnut Ave, St Albans

Brief Description of Events or Comments: Victim was murdered inside her residence by her husband the accused

List Items Submitted: (1) one ~~small~~ tube of blood - blood sample of the victim

(1) one plastic bag containing a nightgown removed from the victim (Vanessa)

Examination(s) Desired: Blood comparison and gun powder residue

List Reports Attached: _____

Received at C.I.B. by: F. L. Zani Via JP M D SmithDate 12-14 19 79 Time _____ A.M. or P.M., E.S.T. or D.S.T.

C.I.B. Disposition of Evidence: _____

Approximate Court Date: _____

*Pertains to Latent Fingerprint Work Only

NOTE: FORWARD THIS REPORT TO THE C.I.B. IN DUPLICATE WITH ITEMS, ONE COPY WILL BE RECEIVED AND RETURNED TO SUBMITTER.

Form No. 33 (4-7-5)

DEPARTMENT OF PUBLIC SAFETY
(Criminal Identification Bureau)
CASE SUBMISSION REPORT

Your Case No. _____

C.I.B. CASE NO. 79-2366
 From: State Police (Organization) Location: St. Charles (City) Date: 1-2 1980
Submitted By: TERRY Williams Rank: TrooperSubject of Investigation: Murder
 Place of Crime: St Albans (Town) Kennewick (County)

Date of Crime: _____ 19____ Time: _____ A.M. or P.M., E.S.T. or D.S.T.

Name of Victim: _____ DOB: _____ Color: _____ Sex: _____

Address: _____

 Suspect or Accused: Paul Regatta III DOB: _____ Color: W Sex: M

Ht. _____ Wt. _____ Criminal History** _____ Fingerprinted** _____

Address: _____

 Brief Description of Events
or Comments* _____

 List Items Submitted: One CD Tube lat blood from Accused

Examination(s) Desired: _____

List Reports Attached: _____

 Received at C.I.B. by: R. C. Simpson Via: T. Williams

 Date: Jan 2 1980 Time: 1:00 PM A.M. or P.M., E.S.T. or D.S.T.

C.I.B. Description of Evidence: _____

Approximate Court Date: _____

**Pertains to Latent Fingerprint Work Only

 NOTE: FORWARD THIS REPORT TO THE C.I.B. IN DUPLICATE WITH ITEMS. ONE COPY WILL BE ACCEPTED AND RETURNED
TO SUBMITTER.

DEPARTMENT OF PUBLIC SAFETY
(Criminal Identification Bureau)

CASE SUBMISSION REPORT

Your Case No. ME 74-898C.I.B. CASE NO. C 79-2566-CFrom: State Police (Organization) Location: South Charleston (City) Date: 12-17 19 79Submitted By: TERRY Williams Rank: TrooperSubject of Investigation: MurderPlace of Crime: St Albans (Town) Kanawha (County)Date of Crime: 12/12-13/ 19 79 Time: _____ A.M. or P.M., E.S.T. or D.S.T.Name of Victim: Bernadette Regnette DOB: _____ Color: _____ Sex: _____Address: 7027 Chesapeake Ave. St. AlbansSuspect or Accused: Paul Regnette DOB: _____ Color: _____ Sex: _____

Hi. _____ Wh. _____ Criminal History** _____ Fingerprinted** _____

Address: Same

Brief Description of Events or Comments: _____

List Items Submitted: One tube of blood from Bernadette Regnette

Examination(s) Desired: _____

List Reports Attached: _____

Received at C.I.B. by: F. S. Zain Via: T. Williams

Date: _____ 19 _____ Time: _____ A.M. or P.M., E.S.T. or D.S.T.

C.I.B. Disposition of Evidence: _____

Approximate Court Date: _____

**Pertains to Latent Fingerprint Work Only

NOTE: FORWARD THIS REPORT TO THE C.I.B. IN DUPLICATE WITH FEES. ONE COPY WILL BE RECEIVED AND RETURNED TO SUBMITTER.

DEPARTMENT OF PUBLIC SAFETY
(Criminal Identification Bureau)
CASE SUBMISSION REPORT

Your Case No. ME 79-877 C.I.B. CASE NO. C-77-7566 C-
From: State Police Location: South Charleston Date: 12 17 19 77
(Organization) (City)
Submitted By: TERRY Williams Rank: Trooper
Subject of Investigation: Murder
Place of Crime: St. Albans Kennebec
(Town) (County)
Date of Crime: 12/12-13/77 19 77 Time: _____ A.M. or P.M., U.S.T. or D.S.T.
Name of Victim: Paul Eric Regatte DOB: _____ Color: _____ Sex: _____
Address: 7027 Chesapeake Ave St Albans
Suspect or Accused: Paul Regatte DOB: _____ Color: _____ Sex: _____
Ht. _____ Wt. _____ Criminal History** _____ Fingerprinted** _____
Address: Same

Brief Description of Events
or Comments:

List Items Submitted:

One tube of blood from Paul Eric Regatte

Examination(s) Desired:

List Reports Attached:

Received at C.I.B. by:

F. A. Zaini

Via T. Williams

Date 12-17 19 77 Time _____ A.M. or P.M., U.S.T. or D.S.T.

C.I.B. Disposition of Evidence:

Approximate Court Date:

**Pertains to Latent Fingerprint Work Only

NOTE: FORWARD THIS REPORT TO THE C.I.B. IN DUPLICATE WITH ITEMS, ONE COPY WILL BE RECEIVED AND RETURNED TO SUBMITTER.

Form No. 33 (I.P.S.)

DEPARTMENT OF PUBLIC SAFETY
(Criminal Identification Bureau)
CASE SUBMISSION REPORT

Your Case No. _____ C.I.B. CASE NO. 77 2566-A

From: State Police (Organization) Location: South Charleston (City) Date: 12-14 1979

Submitted By: TERRY Williams Rank: Trooper

Subject of Investigation: Murder

Place of Crime: St. Albans (Town) Kanawha (County)

Date of Crime: 12/12-13 1979 Time: _____ A.M. or P.M., E.S.T. or D.S.T.

Name of Victim: _____ DOB: _____ Color: _____ Sex: _____

Address: _____

Suspect or Accused: _____ DOB: _____ Color: _____ Sex: _____

Ht. _____ Wt. _____ Criminal History** _____ Fingerprinted** _____

Address: _____

Brief Description of Events or Comments: _____

List Items Submitted: Two Pair Brown Pants - One Shirt
belonging to accused for work

Examination(s) Desired: _____

List Reports Attached: _____

Received at C.I.B. by F. J. Zani via T. Williams

Date 12-14 1979 Time _____ A.M. or P.M., E.S.T. or D.S.T.

C.I.B. Disposition of Evidence: _____

Approximate Court Date: _____

**Pertains to Latent Fingerprint Work Only

NOTE: FORWARD THIS REPORT TO THE C.I.B. IN DUPLICATE WITH ITEMS, ONE COPY WILL BE RECEIPTED AND RETURNED TO SUBMITTER.

Form 33 D.P.S.

DEPARTMENT OF PUBLIC SAFETY
(Criminal Identification Bureau)
CASE SUBMISSION REPORT

Your Case No. _____ C.I.B. CASE NO. 79-2566-A

From: State Police (Organization) Location: South Charleston (City) Date: 12-14 19 79

Submitted By: TERRY Williams Rank: Trooper

Subject of Investigation: Murder

Place of Crime: St. Albans (Town) Kanawha (County)

Date of Crime: 12/12-13 19 79 Time: _____ A.M. or P.M., B.S.T. or D.S.T.

Name of Victim: Paul Eric Raggatz III DOB: _____ Color: _____ Sex: _____
Bernadette Raggatz

Address: 7027 Chesapeake Ave. St. Albans

Suspect or Accused: Paul Raggatz III DOB: _____ Color: _____ Sex: _____

Hi. _____ Wt. _____ Criminal History** _____ Fingerprinted** _____

Address: _____

Brief Description of Events or Comments: _____

List Items Submitted: Two Pair Blue Jeans belonging to Paul Raggatz III
One Work Glove

Examination(s) Desired: _____

List Reports Attached: _____

Received at C.I.B. by: F. J. Zanni Via: T. Williams

Date: 12-14 19 79 Time: _____ A.M. or P.M., B.S.T. or D.S.T.

C.I.B. Disposition of Evidence: _____

Approximate Court Date: _____

** Pertains to Latent Fingerprint Work Only

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Form No. 3 D.P.S.

DEPARTMENT OF PUBLIC SAFETY
(Criminal Identification Bureau)
CASE SUBMISSION REPORT

Your Case No. _____ C.I.B. CASE NO. 100-27566

From: State Police (Organization) Location: Smithfield (City) Date: 1-11 1980

Submitted By: TERRY Williams Rank: Trooper

Subject of Investigation: Murder

Place of Crime: St. Albans (Town) Kennedy (County)

Date of Crime: 12-13 1977 Time: _____ A.M. or P.M., U.S.T. or D.S.T.

Name of Victim: Ruggone DOB: _____ Color: _____ Sex: _____

Address: _____

Suspect or Accused: Paul Ruggone III DOB: _____ Color: _____ Sex: _____

Ht. _____ Wt. _____ Criminal History** _____ Fingerprinted** _____

Address: _____

Brief Description of Events or Comments* _____

List Items Submitted: One (1) Baby Doll (From Childrens Bedroom)

One (1) Knife (" ")

Examination(s) Desired: Blood - Scrapings

List Reports Attached: _____

Received at C.I.B. by: RCM V. T. Williams

Date 1-17 1980 Time _____ A.M. or P.M., U.S.T. or D.S.T.

C.I.B. Disposition of Evidence: _____

Approximate Court Date: _____

** Pertains to Latent Fingerprint Work Only

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CASE SUBMISSION REPORT

Your Case No. _____ C.I.B. CASE NO. C 77 2460

From: DIA (Organization) Location: San Diego (City) Date: 2-7-80 19 80

Submitted By: W. D. Smith Rank: Inspector

Subject of Investigation: _____

Place of Crime: St. Helena (Town) Kern County (County)

Date of Crime: _____ 19 _____ Time: _____ A.M. or P.M., E.S.T. or D.S.T.

Name of Victim: Raymond DOB: _____ Color: _____ Sex: _____

Address: _____

Suspect or Accused: Paul Joseph DOB: _____ Color: _____ Sex: _____

Hi: _____ Wt: _____ Criminal History** _____ Fingerprinted** _____

Address: _____

Brief Description of Events or Comments* _____

List Items Submitted:*

- (1) one blue jacket
- (1) one pair of brown wool slacks - green
- (1) one tan wool shirt
- (1) one brown leather money glove

Examination(s) Desired:*

List Reports Attached: _____

Received at C.I.B. by: Tap. Paul D. Zain Via: _____

Date 2-7 1980 Time _____ A.M. or P.M., E.S.T. or D.S.T. MDS

C.I.B. Disposition of Evidence: No blood identified - Turned back over to

Approximate Cost Date: MDS 2-7-80 FSZ

**Pertains to Latent Fingerprint Work Only

NOTE: FORWARD THIS REPORT TO THE C.I.B. IN DUPLICATE WITH ITEMS, ONE COPY WILL BE RECEIPTED AND RETURNED TO SUBMITTER.

CASE SUBMISSION REPORT

CI - CASE NO _____

Your Case No. _____

From: _____ Location _____ Date: _____ 19 _____
(Organisation) (City)

Submitted By: _____ Rank: _____

Subject of Investigation: _____

Place of Crime: _____ (Country)
(Town)

Date of Crime: _____ 19 _____ Time: _____ A.M. or P.M., E.S.T. or D.S.T.

Name of Victim: _____ DOB: _____ Color: _____ Sex: _____

Address: _____

Suspect or Accused: _____ DOB: _____ Color: _____ Sex: _____

Ht. _____ Wt. _____ Criminal History** _____ Fingerprinted** _____

Address: _____

Brief Description of Events
or Comments: _____

List Items Submitted: ONE BOOK OF BUSINESS LEADERS

Examination(s) Desired: _____

List Reports Attached: _____

Received at C.I.B. by: DH SHUMATE RCM-ES2 Via _____

Date 2-6 1980 Time _____ A.M. or P.M., E.S.T. or D.S.T.

C.I.B. Disposition of Evidence: _____

Approximate Court Date: _____

**Pertains to Latent Fingerprint Work Only

NOTE: FORWARD THIS REPORT TO THE C.I.B. IN DUPLICATE WITH ITEMS, ONE COPY WILL BE RECEIPTED AND RETURNED TO SUBMITTER.

Form FD-302 (Rev. 5-10-65)

DEPARTMENT OF PUBLIC SAFETY
(Criminal Identification Bureau)
CASE SUBMISSION REPORT

Your Case No. _____ CIB CASE NO 77-7566-11From: State Police Location: South Charleston Date: 12-14 1979
(Organization) (City)Submitted By: TERRY Williams Name: TrouperSubject of Investigation: MurderPlace of Crime: St Albans Kanawha
(Town) (County)

Date of Crime: _____ 19 ____ Time: _____ A.M. or P.M., E.S.T. or D.S.T.

Name of Victim: _____ DOB: _____ Color: _____ Sex: _____

Address: _____

Suspect or Accused: _____ DOB: _____ Color: _____ Sex: _____

Hi: _____ Wt: _____ Criminal History** _____ Fingerprinted** _____

Address: _____

Brief Description of Events
or Comments: _____

List Items Submitted: One Pair Brown Suede Boots - One Blue Jean Jacket - One Pair
White Athletic Socks - One Pair Brown Work Pants - Two Pair long Underwear
One Thermal Underwear Shirt - One White T-Shirt - One Pair White Working Shorts
One Tan Work Shirt - One Blue Sweat Shirt - One Red Baseball Jacket - One Blue Baggy
belonging to accused
Examination(s) Desired: _____

List Reports Attached: _____

Received at C.I.B. by: F. S. Zain V. F. WilliamsDate 12-14 1979 Time _____ A.M. or P.M., E.S.T. or D.S.T.

C.I.B. Disposition of Evidence: _____

Approximate Court Date: _____

**Pertains to Latent Fingerprint Work Only

NOTE: FORWARD THIS REPORT TO THE C.I.B. IN DUPLICATE WITH ITEMS, ONE COPY WILL BE RECEIPTED AND RETURNED TO SUBMITTER.

Form No. 1, D.P.S.

DEPARTMENT OF PUBLIC SAFETY
(Criminal Identification Bureau)
CASE SUBMISSION REPORT

Your Case No. _____ C.I.B. CASE NO. 79-2206

From: IPS (Organization) Location: St. Louis (City) Date: _____ 19__

Submitted By: _____ Rank: _____

Subject of Investigation: _____

Place of Crime: _____ (Town) _____ (County)

Date of Crime: _____ 19__ Time: _____ A.M. or P.M., E.S.T. or D.S.T.

Name of Victim: _____ DOB: _____ Color: _____ Sex: _____

Address: _____

Form No. 52 P.S.

DEPARTMENT OF PUBLIC SAFETY
(Criminal Identification Bureau)
CASE SUBMISSION REPORT

Your Case No. _____ C.I.B. CASE NO. 74-2266

From: State Police (Organization) Location: South Cheltenham (City) Date: 1-9 19 80

Submitted By: TERRY Williams Rank: Trooper

Subject of Investigation: Murder

Place of Crime: St. Albans (Town) Kearney (County)

Date of Crime: 1-2-13 1980 Time: _____ A.M. or P.M., E.S.T. or D.S.T.

Name of Victim: Reggie G. Galt DOB: _____ Color: _____ Sex: _____

Address: _____

Suspect or Accused: Paul Reggatt DOB: _____ Color: _____ Sex: _____

Ht. _____ Wt. _____ Criminal History** _____ Fingerprinted** _____

Address: _____

Brief Description of Events or Comments: _____

List Items Submitted: ① One (1) Sample of blood from Rose Gill, p.e.
② One (1) Sample of blood from Marvin David Smith

Examination(s) Desired: _____

List Reports Attached: _____

Received at C.I.B. by: RCM Via: T. Williams

Date: 1-9 1980 Time: _____ A.M. or P.M., E.S.T. or D.S.T.

C.I.B. Disposition of Evidence: _____

Approximate Court Date: _____

** Pertains to Latent Fingerprint Work Only

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Form 1-5 51015

DEPARTMENT OF PUBLIC SAFETY
(Criminal Identification Bureau)
CASE SUBMISSION REPORT

Your Case No. _____ C.I.B. CASE NO. 79-2566

From: DPS (Organization) Location: Sa. Elias (City) Date: _____ 19__

Submitted By: _____ Rank: _____

Subject of Investigation: _____

Place of Crime: _____ (Town) _____ (County)

Date of Crime: _____ 19__ Time: _____ A.M. or P.M., E.S.T. or D.S.T.

Name of Victim: _____ DOB: _____ Color: _____ Sex: _____

Address: _____

Suspect or Accused: _____ DOB: _____ Color: _____ Sex: _____

Ht. _____ Wt. _____ Criminal History** _____ Fingerprinted** _____

Address: _____

Brief Description of Events or Comments: _____

List Items Submitted: Clothing w/ Bernadette Reggette

Examination(s) Desired: Blood group: 39

List Reports Attached: _____

Received at C.I.B. by J.P.A. Zam Vtn 7 Willie

Date 1-7 1980 Time _____ A.M. or P.M., E.S.T. or D.S.T.

C.I.B. Disposition of Evidence: _____

Approximate Court Date: _____

**Pertains to Latent Fingerprint Work Only

NOTE: FORWARD THIS REPORT TO THE C.I.B. IN DUPLICATE WITH ITEMS, ONE COPY WILL BE RECEIPTED AND RETURNED TO SUBMITTER.

Form No. 331 P.S.

DEPARTMENT OF PUBLIC SAFETY
(Criminal Identification Bureau)
CASE SUBMISSION REPORT

Your Case No. _____ C.I.B. CASE NO. 79-2566

From: State Police (Organization) Location: South Charleston (City) Date: 4-22 1980

Submitted By: T. Williams Rank: Trooper

Subject of Investigation: Murder

Place of Crime: St Albans (Town) Kanawha (County)

Date of Crime: 1-2 13 1979 Time: _____ A.M. or P.M., E.S.T. or D.S.T.

Name of Victim: Regnette Family DOB: _____ Color: _____ Sex: _____

Address: _____

Suspect or Accused: John Moss DOB: _____ Color: _____ Sex: _____

Ht. _____ Wt. _____ Criminal History** _____ Fingerprinted** _____

Address: _____

Brief Description of Events or Comments* _____

List Items Submitted: Two (2) tubes of blood taken from
John Moss

Examination(s) Desired: _____

List Reports Attached: _____

Received at C.I.B. by: Tips. Fred A. Jain Via: T. Williams

Date 4-22 1980 Time _____ A.M. or P.M., E.S.T. or D.S.T.

C.I.B. Disposition of Evidence: _____

Approximate Court Date: _____

**Pertains to Latent Fingerprint Work Only

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C-79-2566

- #1: Pieces of knife from bedroom beside bath.
- #2: Sample from room next to bath where female victim found.
- #3: Sample from front bedroom carpet.
- #4: Bedspread from front bedroom.
- #5: Pillow case from front bedroom.
- #6: Electrical cord removed from female victim.
- #7: Curtain from back kitchen door.
- #8: Sample from sheet on kitchen floor.
- #9: Sample from outside back door below door handle.
- #10: Sample from kitchen sink.
- #11: Sample from utensil drawer from kitchen.
- #12: Pillow case from bedroom beside bath.
- #13: Sample from door between bedroom and living room.
- #14: Sample from door between master bedroom and front door.
- #15: Change purse from dresser in master bedroom.
- #16: Medium white t-shirt found under pile of clothes in master bedroom.
- #17: Jockey shorts found under pile of clothes in master bedroom.

Form No. DJ D P 3.

DEPARTMENT OF PUBLIC SAFETY
(Criminal Identification Bureau)
CASE SUBMISSION REPORTC.I.B. CASE NO. 79 2566out Case No. _____ Date: 12/13 19 79from: DPS HEADQUARTERS Location: SO. CHARLESTON Rank: TROOPER
(Organization) (City)Submitted By: F. S. ZAINSubject of Investigation: MURDER (County)Place of Crime: St. Albans, WV (Town) A.M. or P.M., E.S.T. or D.S.T.Date of Crime: 12/12-13/79 19 79 Time: _____ Color: W Sex: FName of Victim: VANESSA REGGETT DOB: _____ Color: W Sex: MAddress: 7027 Chesapeake Ave., St. Albans, WVSubject or Accused: Paul Reggett DOB: _____ Fingerprinted: YesI. Wt. Criminal History: _____Address: 7027 Chesapeake Ave., St. Albans, WVBrief Description of Events: Victim was murdered inside her residence.
Comments: _____List Items Submitted: SEE ATTACHED SHEETLaboratory(s) Desired: Blood groupings

List Reports Attached: _____

Received at C.I.B. by: F.S. Zain Via: F.S. ZainDate: 12-13 19 79 Time: _____ A.M. or P.M., E.S.T. or D.S.T.

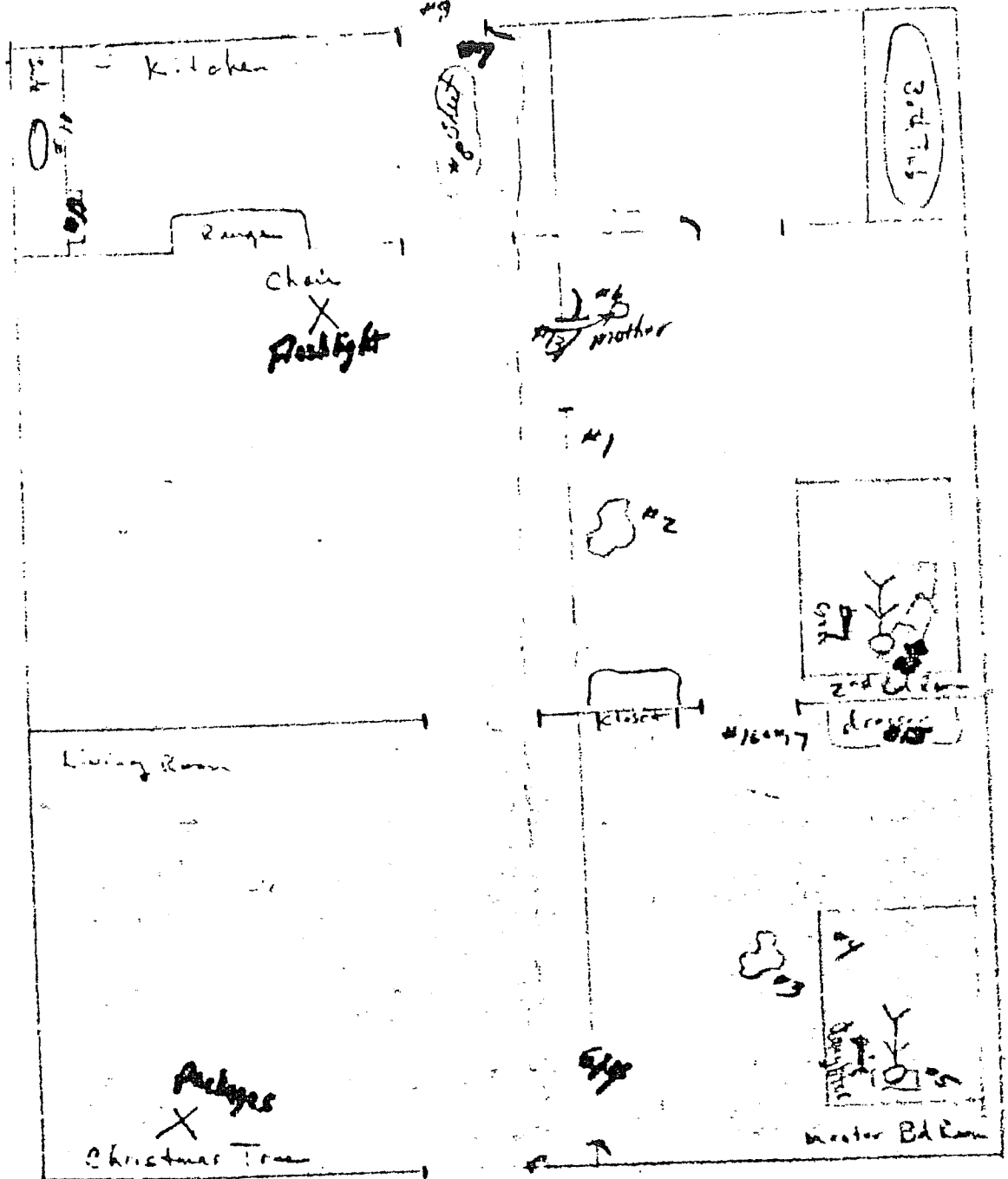
I.B. Disposition of Evidence: _____

Approximate Court Date: _____
* Pertains to Latent Fingerprint Work Only

NOTE: FORWARD THIS REPORT TO THE C.I.B. IN DUPLICATE WITH ITEMS, ONE COPY WILL BE RECEIPTED AND RETURNED TO SUBMITTER.

[illegible]

[illegible]



Pen
Women (261) man
Paul (201) 1, 2-1.
Girl (2) 2 1, 2-1 1, 2-1
1 2

2 (2), 2-1 PGM 1

(2) —

RECEIPT FOR RETURN OF EVIDENCE

The following exhibits in the case number C-79-2566 were given

to Trooper Terry Williams on 3-11-81

by [Signature]

1. Exhibits in above case
C.R.N. - 10-11-81 C.R.N. - 10-11-81
2. _____
3. _____
4. _____
5. _____
6. _____

Trooper Terry Williams
Signature of Officer Receiving Exhibits

RC Murphy
Signature of Chemist
Tip Fred D. Zuer

Prepare in Duplicate.

RECEIPT FOR RETURN OF EVIDENCE

The following exhibits in the case number C-79-2566-A
C-79-2566 were given

to Trooper T. Williams on 03/31/80

by Trooper F. S. Zain

1. Exhibits to above case
2. History
3. _____
4. _____
5. _____
6. _____

T. Williams

Signature of Officer Receiving Exhibits

Trooper F. S. Zain

Signature of Chemist

Prepare in Duplicate.

<p>① ? Pieces of K&C <u>Zain 12-13-79</u> <u>Williams 3-31-80</u></p>	<p>② ? Piece of electrical #110B short card from Vanessa <u>Zain 12-13-79</u> <u>Williams 3-31-80</u></p>	<p>③ ? Curtain from back door <u>Zain 12-13-79</u> <u>Williams 3-31-80</u></p>	<p>④ ? Scissors <u>Zain 12-13-79</u> <u>Shumate 12-13-79</u> Williams 1-23-80 Williams 3-31-80</p>	<p>Green St Zain still</p>
<p>⑥ ? Eureka Vacuum Cleaner <u>Shumate 12-13-79</u> <u>Williams 1-23-80</u> Williams 3-31-80</p>	<p>⑦ ? Clock Radio <u>Shumate 12-13-79</u> <u>Williams 1-23-80</u> Williams 3-31-80</p>	<p>⑧ ? Childrens dish set <u>Shumate 12-13-79</u> <u>Williams 1-23-80</u> Williams 3-31-80</p>	<p>⑨ ? Pots + Pan Set <u>Shumate 12-13-79</u> <u>Williams 1-23-80</u> <u>Williams 3-31-80</u></p>	<p>Cloth Sop Will Zain Will</p>

<p>?</p> <p>1</p> <p>set</p> <p>13-79</p> <p>-31-80</p>	<p>(4)</p> <p>?</p> <p>Scissors</p> <p>Zain 12-13-79</p> <p><u>Shumate 12-13-79</u></p> <p>Williams 1-23-80</p>	<p>(5)</p> <p>?</p> <p>Green hand lotion</p> <p><u>Shumate 12-13-79</u></p> <p><u>Zain 12-18-79</u></p> <p>st Williams 3-31-80</p>	<p>glassware</p> <p>Williams</p>
<p>?</p> <p>set</p> <p>-13-79</p> <p>1-80</p> <p>-80</p>	<p>(9)</p> <p>?</p> <p>Pats + Pam Sat</p> <p>Shumate 12-13-79</p> <p>Williams 1-23-80</p>	<p>(10)</p> <p>?</p> <p>Clothing of P. Regatta</p> <p>Sopher 12-13-79</p> <p>Williams 12-14-79</p> <p><u>Zain 12-24-79</u></p> <p>Williams 3-31-80</p>	

<p>?</p> <p>Reggatz</p> <p>12-15-79</p> <p>12-17-79</p> <p>7-79</p>	<p>(14)</p> <p>Blood ?</p> <p>Bernadette Reggatz</p> <p>Sopher 12-13-79</p> <p>Williams 12-17-79</p> <p>Zain 12-17-79</p>	<p>(15)</p> <p>Clothing ?</p> <p>Bernadette Reggatz</p> <p>Sopher 12-13-79</p> <p>Williams 12-17-79</p> <p>Zain 1-7-80</p> <p>Williams 7-3-80</p> <p>3/31/80</p>	
<p>?</p> <p>bullet</p> <p>the scan</p>	<p>(19)</p> <p>N ?</p> <p>Time Card of P. Reggatz</p>	<p>(20)</p> <p>?</p> <p>Electrical Cord</p> <p>Paul Eric Reggatz</p>	
<p>2-13-79</p> <p>14-79</p>	<p>David W. Milburn - 12-13-79</p> <p>Rinehart - 12-13-79</p> <p>Williams 12-13-79</p>	<p>Sopher 12/13/79</p> <p>Williams 12/17/79</p>	

<p>⑪</p> <p>Blood Specimen ?</p> <p>Vanessa Resgettz</p> <p>Sopher 12-14-79</p> <p>Smith 12-14-79</p> <p>Zain 12-14-79</p>	<p>⑫</p> <p>Nightgown of ?</p> <p>Vanessa Resgettz</p> <p>Sopher 12-14-79</p> <p>Smith 12-14-79</p> <p>Zain 12-14-79</p> <p>Williams 3-31-80</p>	<p>⑬</p> <p>Blood ?</p> <p>Paul E. Resgettz</p> <p>Sopher 12-14-79</p> <p>Williams 12-17-79</p> <p>Zain 12-17-79</p>	<p>Bern</p> <p>Soph</p> <p>Willi</p> <p>Zai</p>
<p>⑭</p> <p>?</p> <p>Flatware</p> <p>Mrs Johnson 2-6-80</p> <p>Smith 2-6-80</p> <p>Williams 2-6-80</p> <p>Shumate 2-6-80</p> <p>Zain 2-6-80</p> <p>Williams 3-31-80</p>	<p>⑮</p> <p>?</p> <p>Pieces of gun</p> <p>Williams 12-13-79</p>	<p>⑯</p> <p>?</p> <p>.22 caliber bullet</p> <p>recovered at the scene</p> <p>Williams 12-13-79</p> <p>Lane 12-14-79</p>	<p>Time C</p> <p>David</p> <p>Rinehar</p> <p>Willia</p>

<p>(21) ? Electrical Cords-? (white + brown) 1110 VANESSA Reggattz 1110 #110A Sopher 12/13/79 Williams 12/12/79</p>	<p>(22) ? Electrical Cord (Brown) NEAR FEET VANESSA Reggattz Ronek 12/13/79 Williams 12/12/79</p>	<p>(23) ? Electrical Card (white) (Piece of card) cut from VANESSA Reggattz ZAIN 12/13/79 Williams 12/12/80</p>
<p>(26) ? (1) Kodak Camera (From MR. MOSS) John Moss JR.</p>	<p>(27) ? FIREARMS Transaction Records Forms (HEATS)</p>	<p>(28) ? (2) tubes blood John Moss</p>
<p>John Moss JR 10/29/80 (Father) Smith + Williams 10/29/80</p>	<p>Ella Light Smith + Williams</p>	<p>DR. Kaplan 4-22-80 Williams 4-22-80 ZAIN 4-22-80</p>

<p>(23) ?</p> <p>Electrical Cord (wire) Piece of road cut from VANESSA REGGETT</p> <p>ZAIN 12/13/79 Williams 3/31/80</p>	<p>(24) ?</p> <p>Change PURSE DRESSER MASTER Bedroom</p> <p>ZAIN 12/13/79 Williams 3/31/80</p>	<p>(25) ?</p> <p>(2) Polaroid Cameras (1) Kodak Camera (SEARCH)</p> <p>Smith & Williams 1/29/80</p>	<p>Wrapping Paper</p> <p>Williams 3/31/80</p>
<p>(28) ?</p> <p>1) tubes blood John Moss</p> <p>Kepler 4-22-80 Williams 4-22-80 IN 4-22-80</p>	<p>(29) ?</p> <p>Knife Handle</p> <p>Shumate 12-13-79 Williams 12-24-80</p>	<p>(30) ?</p> <p>Reggett Blood</p> <p>Wanda Wells 1-2-80 ✓ Williams 1-2-80 Inman 1-2-80</p>	<p>(31)</p> <p>Guns</p> <p>1-24-80</p>

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IN THE CIRCUIT COURT OF KANAWHA COUNTY, WEST VIRGINIA

JOHN MOSS, III,

Petitioner,

vs. CASE NO. 94-MISC-663

GEORGE TRENT, warden of the
West Virginia State Penitentiary,

Respondent.

The deposition of DAVID H. BING was taken on the 5th day of June, 1995, beginning at 1:40 o'clock p.m., at the Kanawha County Judicial Annex, Judge Paul Zakaib's Jury Room, 111 Court Street, Charleston, Kanawha County, West Virginia, before Barbara Harris, Notary Public and Certified Court Reporter, pursuant to written notice, for the purposes of discovery and/or to be read as evidence in the above-styled matter which is now pending and undetermined in said Court.

1 (WHEREUPON, documents were marked
2 for identification purposes as
3 Deposition Exhibit Nos. 3, 4, and 5,
4 and are attached hereto.)
5 (Witness Sworn.)
6 MR. SIMMONS: Before we begin, I'd just like
7 to note for the record that we're taking the deposition of
8 Doctor David Bing in connection with the habeas corpus
9 action filed on behalf of John Moss, III. My client has
10 been notified of the deposition. He also has been informed
11 that with habeas corpus actions he does not have an
12 absolute right to be present at all proceedings, and he's
13 aware of that fact. And that the purpose of taking this
14 deposition is to make a record on some of the scientific
15 issues that are set out in the habeas corpus petition and
16 in an affidavit filed by Doctor David Bing.
17 And also I would note for the record that
18 three exhibits have already been marked. Deposition
19 Exhibit 3 is the recent curriculum vitae of Doctor David
20 Bing. Deposition Exhibit 4 is an affidavit executed by
21 Doctor Bing, executed on May 26, 1995, and that's an eight-
22 page document. And then Deposition Exhibit No. 5 are
23 tables that were included in the habeas corpus petition

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APPEARANCES: on behalf of the Petitioner:

LONNIE C. SIMMONS, Esquire
DiTrapano & Jackson
604 Virginia Street, East
Charleston, West Virginia 25301

On behalf of the Respondent:
MARY BETH KERSHNER, Esquire
Assistant Prosecuting Attorney
111 Court Street
Charleston, West Virginia 25301

INDEX

Examination by

Witness	Mr. Simmons	Ms. Kershner
DAVID H. BING	4	46
Exhibits	Identified	
Deposition Exhibit No. 3		3
Deposition Exhibit No. 4		3
Deposition Exhibit No. 5		3
Reporter's Certificate - 51, 52		

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1 which summarize the various findings made from the blood
2 testing that was performed in this case.
3 THEREUPON came
4 DAVID H. BING,
5 a witness herein, who, after having been first duly sworn
6 to tell the truth, testified as follows:
7 EXAMINATION
8 BY MR. SIMMONS:
9 Q Doctor Bing, first of all, I'd like to ask
10 you to glance at Deposition Exhibit No. 3 and confirm
11 whether or not that's a copy of your most recent curriculum
12 vitae.
13 A (Witness examines document.) Yes, it is.
14 Q You note in the affidavit that you are the
15 Scientific Director of Laboratories of CBR Laboratories in
16 Boston, Massachusetts. Could you generally describe what
17 CBR Laboratories does?
18 A CBR Laboratories is a licensed medical
19 diagnostic testing laboratory. It performs medical
20 testing, diagnostic testing for physicians and primarily
21 the Harvard Medical School hospitals. It does testing in
22 the areas of immunohematology and hematology. About
23 eighty-five percent of its work now is involved in DNA

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1 diagnostic testing, but we still maintain a very active
2 profile in the area of blood typing and the analysis of
3 genetic markers in blood based on blood typing and also
4 analysis of serum proteins. It's a part of the work that
5 we do in terms of paternity testing.

6 Q Okay. Approximately how long have you been
7 the Scientific Director of Laboratories at CBR?

8 A Well, my current title is Director of
9 Clinical Testing, and I've really been in that position
10 since 1986.

11 Q Can you also generally describe -- Focusing
12 on the forensic testing, could you generally describe the
13 kind of forensic testing that is conducted at CBR?

14 A The type of forensic testing that is done
15 primarily focuses on DNA typing methods, particularly
16 those -- the two principle kinds of DNA typing methods, the
17 RFLP, which is known as Restriction Fragment Length
18 Polymorphism, P-o-l-y-m-o-r-p-h-i-s-m, Polymorphism, and
19 the Polymerase, P-o-l-y-m-e-r-a-s-e, Chain Reaction
20 Methodology.

21 But the laboratory does paternity testing,
22 and in the area of paternity testing we do a full panel red
23 cell antigen typing, serum proteins, genetic typing of

1 record. What kinds of licenses are you referring to?

2 A These are medical diagnostic testing
3 licenses. We are certified in the Commonwealth of
4 Massachusetts. We have a license in the state of
5 Connecticut, the Commonwealth -- maybe the state of
6 Maryland, the state of New York. We have a CLIA, that's
7 C-L-I-A, license from the Health and Human Services which
8 allows us to accept blood samplings from other states for
9 clinical testing. And we do paternity testing in almost
10 every state except New York State, so that this is a kind
11 of testing that involves kind red cell genetic -- serum
12 protein genetic typings that I've just described.

13 Q Okay. I'm not sure about this answer or
14 not, so I'll ask you, is your laboratory involved with
15 ASCLD, A-S-C-L-D, or its accreditation program or whatever
16 they refer to it?

17 A I have petitioned to join ASCLD, which
18 stands for American Society of Crime Lab Directors, and my
19 application is currently undergoing review. I have a
20 letter that I have to respond to. It's laying on my desk
21 right now. And I anticipate that this summer the
22 laboratory will be submitting an application to ASCLD Lab
23 to be accredited. You have to be doing forensic work for

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1 serum proteins, HLA, and when required, we will -- We don't
2 do it in our laboratory, but we will send out for analysis
3 of red cell enzymes, such as phospho, gluco, mutase,
4 abbreviated PGM, Esterase D, abbreviated EsD.

5 We do glyoxalase testing in our laboratory.
6 We still do that. That's for glow. But we don't do all
7 the red cell enzymes. But we use them on occasion in our
8 paternity testing results and use the genetic typing
9 information that is in these systems in terms of arriving
10 at a conclusion.

11 And I'm accredited for doing that kind of
12 work because I'm accredited by the American Association of
13 Blood Banks as a technical director for paternity testing,
14 which means I have to be able to use those systems in our
15 work.

16 Q So prior to the development of DNA testing,
17 did CBR Laboratories and yourself routinely perform, I
18 think what you called the red blood cell typings?

19 A It did, and it still does. At the point
20 when I took over the laboratory it was still doing this
21 kind of work and still is doing it today.

22 Q I think you mentioned that the laboratory
23 was generally licensed. I just want it to be clear in the

1 at least five years before you're eligible to apply to
2 ASCLD. We consider that we really started around the
3 middle of 1990, so the middle of 1995 is the time of year
4 eligible to apply.

5 The laboratory adheres to the rules for DNA
6 forensic analysis articulated by the technical working
7 group on DNA analysis methods, and based on what I've seen
8 in the ASCLD accreditation manual, you know, how to do it,
9 the laboratory follows, for the most part, the regulations
10 of ASCLD Lab, because in many, many instances they're
11 identical to the regulations that we follow for our
12 clinical license.

13 Q What is your involvement in TWGDAM,
14 T-W-G-D-A-M?

15 A I'm just a member of the committee. There's
16 sixty people on the committee made up of crime lab
17 directors around the country. I'm the representative from
18 the Human Identity Trade Association, which is a collection
19 of private testing laboratories that have representation on
20 this committee.

21 Q Okay. Can you explain what the significance
22 of TWGDAM is?

23 A Well, in 1983 -- no, not 1983 -- 1989 or so

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1 it became imperative for there to be some kind of consensus
 2 about how DNA testing should be done for forensic purposes
 3 here in the United States. A group of people was assembled
 4 at the FBI made up primarily of crime lab directors from
 5 public laboratories, and their job was to articulate
 6 guidelines for laboratories undertaking DNA analysis
 7 methods and guidelines for systems that were to be adopted
 8 for DNA analysis methods. And these guidelines really
 9 follow, for example, the rules -- or I mean they're very
 10 similar to the rules that we use that we have from the
 11 American Association of Blood Banks, where we're accredited
 12 for paternity testing. They're almost identical in every
 13 respect.

14 People have to have the proper training.

15 They have to be in place. There are procedures in the
 16 laboratories. Systems that are used for doing the testing
 17 have to follow certain scientific principles and obey
 18 certain kinds of genetic rules. It's very much the same.

19 Q And I guess the final area of your
 20 credentials, you noted in the affidavit that you were
 21 qualified as an expert in molecular biology, forensic
 22 science, and genetics in the case of Glen Dale Woodall
 23 versus Carl Legursky. That was in Cabell County. Is that

1 just by going through the affidavit -- you note that in
 2 connection with Moss versus Duncil you reviewed a copy of
 3 the autopsy report that's dated December 13, 1979 that was
 4 performed by Doctor Irvin Sopher; is that correct?

5 A That's correct.

6 Q Okay. You generally reviewed the Petition
 7 for Writ of Habeas Corpus that was filed in this case?

8 A Yes, I did.

9 Q Okay. You reviewed a copy of Fred Zain's
 10 testimony from the first and second trials in the Moss
 11 case?

12 A Yes, I did.

13 Q Okay. You reviewed a copy of the laboratory
 14 notes and other documents that were produced by the State
 15 in this Moss case?

16 A Yes, I did.

17 Q And I believe -- Let's see. Yes, I believe
 18 that's all the materials you reviewed, other than I think
 19 maybe I sent you the -- I may have sent you the deposition
 20 of Robert Murphy. Do you recall seeing that?

21 A Let me check my notes. Well, no, I don't
 22 have the deposition of Robert Murphy.

23 Q Okay. I may not have sent it to you. I

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1 correct?

2 A That's correct.

3 Q And you were also qualified as an expert in
 4 those particular fields in the case Paul William Ferrell
 5 versus William Duncil, which was in Grant County; is that
 6 correct?

7 A That's correct.

8 Q And in both the Woodall and Ferrell cases,
 9 your expertise involved not only performing DNA testing,
 10 but also reviewing the protein and enzyme typing that had
 11 been performed by other scientists?

12 A Yes, I was asked to do that, and I testified
 13 about that in court.

14 Q Okay.

15 MR. SIMMONS: I'm not exactly sure how you
 16 want to do this, Mary Beth, if you wanted to ask him a
 17 question, I would now offer him as an expert in molecular
 18 biology, forensic science, and genetics in the present
 19 case.

20 MS. KERSHNER: I don't have any objection.

21 BY MR. SIMMONS:

22 Q Okay. Turning to the Moss case -- and I'll
 23 try to get through some of this preliminary stuff quickly

1 wasn't sure if I had or not.

2 In the materials you reviewed from the Moss
 3 case, you note in your affidavit that there were no
 4 photographs of the electrophoretic gels. First of all, I
 5 just wondered if you would explain how photographs of those
 6 gels would have assisted you in your analysis of the
 7 testing?

8 A This type of genetic typing, at least the
 9 enzymes, is based on looking at patterns of the proteins
 10 that are being tested under conditions where they move in
 11 an electric field. And they will move differently in an
 12 electric field depending on what genetic type they are
 13 reflecting, so that what this -- what these photographs do
 14 is allows one to look directly at the results of this
 15 testing and correlate that with the actual recorded test
 16 results.

17 In our laboratory it's standard practice to
 18 make a photograph of every single genetic typing that we
 19 do, and that photograph is maintained for as long as keep
 20 these files.

21 Q So without being able to review the
 22 photographs of the electrophoretic gels that were performed
 23 in this case, you have no basis for determining whether or

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1 not the typings that were determined to have been found are
2 correct or accurate or not?

3 A I have the -- I gather there's a sworn
4 deposition from Mr. Murphy that attests to the accuracy of
5 these results. I haven't read it, but I would imagine that
6 it does. Certainly the notes agree with what the final
7 reports are. But as in all kinds of testing, what one
8 hopes for is the opportunity to see the results to see if
9 there's any kind of difference in opinion in terms of
10 interpretation of those results, because there can be
11 widely differing interpretations of test results. So in
12 the absence of being able to do that, it's very difficult
13 to really validate the test results that are recorded in
14 the worksheets that I did have the opportunity to review.

15 Q You also note in your affidavit that you are
16 generally aware of the special investigation into testing
17 performed by Fred Zain. I just wonder if you could state
18 generally how many cases involving Fred Zain have you
19 reviewed as an expert?

20 A Well, there's Woodall -- the Woodall case.
21 Did Zain work on the Ferrell case?

22 Q No, that was the FBI.

23 A That was the FBI. Okay. The case called

1 but they're not -- To the best of my recollection, in no
2 case was there a complete set of what I would call raw data
3 that was available for review, although there was partial
4 results.

5 In no case were any photographs available
6 for review, in no case. It's not the practice of every
7 forensic lab to take photographs. I would be the first to
8 admit that. But I think in light of what this is going to
9 be used for, I think it is -- it's not an unreasonable
10 practice to have photographic documentation of test results
11 where the test results are based on interpretation of
12 patterns that are seen and not measured on an instrument or
13 something.

14 Q You also note in your affidavit that there
15 was no protocol provided, and I believe, even though you're
16 not familiar with Mr. Murphy's deposition, his testimony
17 was that there was no protocol, written protocol, back in
18 1979. I just wonder if you would explain what is the
19 significance of having a written protocol in a forensic
20 laboratory.

21 A It essentially is a documentation of how the
22 test was conducted and how -- most protocols usually also
23 have some indication about how the results are interpreted.

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1 West Virginia versus Davis, I think Mr. Zain worked on that
2 case. The case of West Virginia versus Harris, he worked
3 on that case. I believe there's a case of West Virginia
4 versus Richardson, I think Mr. Zain worked on that case.
5 And also a case of West Virginia versus McClure, I've
6 worked on that case. And there's a case of West Virginia
7 versus Ward, and I've worked on that case.

8 Q Okay.

9 A And there are others that are still pending.

10 Q Had you previously reviewed any of the
11 documentation that was developed by the special
12 investigation into Fred Zain's work in West Virginia?

13 A I read the ASCLD summary review.

14 Q In reviewing the Fred Zain cases, just
15 generally speaking, that you mentioned, have you generally
16 found what, in your opinion, were certain problems with
17 some of his work?

18 A Each case is different, and the
19 circumstances of each case are different. But overall one
20 of the difficulties in reviewing these cases is that all
21 that's been available for review has been the summary
22 worksheets on which the results were finally recorded. And
23 then there's some original worksheets in some of the cases,

1 And protocol will document how you set up the test, the
2 agents and things that go into making the test. It's sort
3 of like a recipe for -- You know, you could sort of draw an
4 analogy.

5 What the scientist is doing in the
6 laboratory is actually baking the cake, and protocol is the
7 recipe for what goes into making that cake. If the recipe
8 calls for making chocolate cake and you have a lemon cake
9 instead, you could ferret that out by looking at the
10 protocol and say, you know, you didn't get the result that
11 you thought you were going to get based on the protocol
12 that's outlined.

13 Q Would it be correct to say that a written
14 protocol would help standardize the practice in the
15 laboratory, if, in fact, that written protocol were
16 followed?

17 A Well, that's one of the requirements by
18 ASCLD Lab now. ASCLD Lab does other things besides DNA.
19 For example, it accredits laboratories in the area of
20 serology. And a written protocol is one of their absolute
21 requirements. Now, ASCLD Lab, this is an evolving
22 organization, and this has really only begun to happen
23 around 1990, '91, '92 that these have begun to evolve, is

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<p>1 my understanding.</p> <p>2 Q You mean the ASCLD Lab requirements?</p> <p>3 A ASCLD Lab was always available for</p> <p>4 accrediting laboratories, but pretty much prior to 1990 not</p> <p>5 many laboratories really applied for that accreditation</p> <p>6 because it wasn't really a very strong organization. That</p> <p>7 may not be fair to say. It wasn't an organization to which</p> <p>8 laboratories looked for guidance in terms of establishing</p> <p>9 standardized protocols in their laboratory.</p> <p>10 With the need for standardization in the</p> <p>11 forensic genetic testing field, and serology is part of</p> <p>12 that field, ASCLD Lab has always been there and has stepped</p> <p>13 forward and is providing this service to laboratories that</p> <p>14 allows them to become standardized within the field. So</p> <p>15 it's always been there. It's just that it's only recently</p> <p>16 that its importance has become emphasized in forensic</p> <p>17 laboratories.</p> <p>18 Q Would you say that -- And, again, this case</p> <p>19 dates back to 1979. Do you have any basis for</p> <p>20 understanding or stating that in 1979 most forensic</p> <p>21 laboratories would have some written protocol or would that</p> <p>22 have been unusual?</p> <p>23 A No, that wouldn't have been unusual. For</p>	<p>1 quality control/quality assurance program, there still</p> <p>2 was -- they still could have run positive and negative</p> <p>3 controls on every single sample that was run so they could</p> <p>4 internally QC any given run.</p> <p>5 As near as I could -- There's no evidence in</p> <p>6 any of the notes that the agents were checked with these</p> <p>7 controls prior to any of the runs, for example, to make</p> <p>8 sure that the red cell antigens -- The glutinating agents,</p> <p>9 called the antisera or antibodies that are used in red cell</p> <p>10 glutinations, you normally check them before you do a run</p> <p>11 to make sure they're working, and those are usually</p> <p>12 recorded in the notes of a run.</p> <p>13 Controls are usually run of electrophoresis</p> <p>14 of known samples. PGM, for example, there's a known</p> <p>15 standard that contains all the known types, and that's</p> <p>16 always run in parallel with the unknowns just to do a</p> <p>17 control on that.</p> <p>18 So those kinds of things could have been</p> <p>19 done in 1979. It's just a matter of the laboratory</p> <p>20 director's decision as to whether or not those should be</p> <p>21 done. But I mean, for example, in our laboratory we were</p> <p>22 doing -- The CBR Laboratories, even though I wasn't in</p> <p>23 charge of it, but in 1979 I can show you work pages where</p>
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<p>1 example, I have -- in my collection of protocols I have a</p> <p>2 protocol from the FBI dated 1974 which outlines all</p> <p>3 procedures for doing serological analysis of forensic</p> <p>4 samples. So laboratories were well aware that these</p> <p>5 protocols existed, and, you know, if you wanted to, you</p> <p>6 could just adopt the FBI protocol, drop into your</p> <p>7 laboratory, and say, "This is what we're going to do." It</p> <p>8 was freely available to all the public testing laboratories</p> <p>9 and still is.</p> <p>10 Q On a different issue -- And, again, I'll</p> <p>11 represent to you that Mr. Murphy testified that in 1979 the</p> <p>12 West Virginia laboratory did not have a formalized quality</p> <p>13 control/quality assurance program, and they did not, for</p> <p>14 example, test some of the enzymes and other materials used</p> <p>15 in the testing on a regular basis to make sure that those</p> <p>16 items were appropriate for use in testing. I wonder if</p> <p>17 you'd explain the importance of having a quality</p> <p>18 control/quality assurance program in a forensic laboratory.</p> <p>19 A Well, again, quality assurance and quality</p> <p>20 control is something that has become recognized over the</p> <p>21 past five or six years as being important in a forensic</p> <p>22 laboratory. And most laboratories are doing this now.</p> <p>23 Prior to that time, even if a laboratory didn't have a</p>	<p>1 all of the -- and photographs of gels where controls were</p> <p>2 run on every single run that was done. So it's good</p> <p>3 laboratory practice and generally acknowledged by people</p> <p>4 who ran laboratories at that time as being important things</p> <p>5 to do.</p> <p>6 Q In your review of the documentation provided</p> <p>7 by the State in connection with the testing, you noted in</p> <p>8 your affidavit that none of the original notes of the work</p> <p>9 performed were made available to you. What was your basis</p> <p>10 for making that assertion?</p> <p>11 A Well, most of the documentation I received</p> <p>12 were reports, handwritten summaries that eventually became</p> <p>13 the reports, summaries of -- I call them worksheet</p> <p>14 summaries, in other words, all the composite results were</p> <p>15 listed of the samples tested. Now, there should be a</p> <p>16 notebook or some kind of backup to that information. It</p> <p>17 just isn't there.</p> <p>18 Q Have you reviewed -- or generally speaking,</p> <p>19 in your review of the Fred Zain cases that you mentioned,</p> <p>20 have you seen some cases where the original notes were</p> <p>21 included?</p> <p>22 A There were some where the original notes</p> <p>23 were available, yes.</p>

1 Q What is it about the original notes that
2 distinguishes them from the summary sheets you described?

3 A Well, they are -- Some of these original
4 notes will have, like, for example, I've seen -- I'm
5 trying -- I can't remember the case exactly, but there were
6 some PGM results where it was possible to sort of track
7 down through these handwritten notes where the original
8 results were recorded. And in some instances there would
9 be a place where controls were run, and they, in fact, were
10 run and recorded, and other places where there were
11 controls that were supposed to be run and it was just left
12 blank, so it meant they weren't run or they weren't
13 recorded, one or the other. I didn't have any of that kind
14 of documentation with this particular case.

15 Q In the affidavit you've generally summarized
16 that -- and this is in number 15 of the affidavit -- that
17 these various problems, lack of documentation, no protocol,
18 in your opinion, render the scientific data in this case
19 meaningless. I just wonder if you could elaborate on that
20 statement.

21 A Well, by that I mean that the -- there is so
22 much data on these stains that weren't analyzed, it would
23 seem to me there should be some extensive notes backing

1 to exclude the person who is false -- who is not the true
2 biologic donor of a given sample. So that to that extent,
3 one tests, and if one has no exclusion, you keep testing
4 and testing and testing until you reach sort of the end of
5 what you're able to test for. At that point if you have no
6 exclusion, then you can, at that point, make some kind of
7 comment about how often you might expect to find this
8 combination of markers.

9 But in the meantime, if there are people who
10 are potential donors to these samples, scientifically you
11 want to be able to test all the people who might be true
12 biologic -- who are candidates to be true biologic donors
13 of these samples. So if there are other people involved
14 besides the people who were involved in this report, they
15 really should have been -- they should be included in the
16 testing panel, if it's possible. And it's not always
17 possible, and I'd be the first to acknowledge that.

18 Q Okay. You state that under the facts of
19 this case that, at a minimum, the persons who lived in the
20 Reggett house, which would include the three victims,
21 Vanessa Dale Reggett, Paul Eric Reggett, and Bernadette
22 Reggett, and then the father, Paul Reggett, III, would be
23 known possible donors of blood; is that correct?

1 that material up. So that in that -- in the context of not
2 being able to look at the backup data, other than the
3 summaries, it becomes, you know, almost impossible for me
4 to either agree or disagree with the final outcome of the
5 results. And that's what I mean by when I say it's
6 meaningless. I can't agree, I can't disagree. All I can
7 say is what was reported.

8 Q You next generally state that for purposes
9 of your review, that even assuming the accuracy of the
10 typings in this case, the conclusions were flawed for
11 several reasons. And we'll go through those and maybe, to
12 the extent that you can, illustrate any of these with
13 specific examples, it would be helpful to do so. And if
14 you want to diagram anything that you feel might help
15 explain something, I'll make my legal pad available for
16 you, and we can make that an exhibit.

17 One of the first general ideas or principles
18 you stated was that where blood samples are discovered at
19 an alleged crime scene, it's important to identify the
20 types of the known possible donors of that blood. I wonder
21 if you'd explain why that is the case.

22 A Well, forensic testing is designed to
23 exclude. That's why this testing is done. It's designed

1 A That's correct.

2 Q And as far as you know, based upon your
3 review, you're not aware of any other known possible donors
4 of blood in the Reggett house?

5 A No.

6 Q The second point that you make is that only
7 those types identified from blood found at the alleged
8 crime scene that are different from the types of the known
9 possible donors provide information relevant to a
10 determination as to the source of the blood evidence found
11 at the crime scene. I wonder if you could explain that,
12 and if you feel that an illustration is appropriate, do
13 that.

14 A Well, let me try to explain it, and then, if
15 necessary, I can provide an -- do a drawing. The -- At a
16 crime scene, when stains are collected, the origin of those
17 stains is unknown, so one always has to make the -- one
18 can't make any assumptions about the potential -- about who
19 the donors are. But more important, one cannot make an
20 assumption that any given blood stain collected at a crime
21 scene is from a single source. So if one wants to
22 distinguish possible sources of that blood and you have a
23 group of people who all have that -- all have a given type,

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1 then that type doesn't really help you distinguish the
 2 source of that blood, because you can't assume that it's
 3 not a mixture.
 4 Think of it another way. Suppose that the
 5 distinguishing factor of a blood stain was something that
 6 you can actually visualize. Suppose that you could look at
 7 this blood stain and you could say unequivocally, "I know
 8 that that blood stain came from somebody who has brown
 9 hair." Brown hair is a genetic marker. In some ways it's
 10 very similar to, say, a blood type antigen because there is
 11 a certain -- The color or the reason it's brown is due to
 12 certain genetic markers that result in color. So you say I
 13 know -- It doesn't make any difference how I know it. I
 14 know this blood stain is from somebody who has brown hair.
 15 Now, you get your list of possible donors to that and you
 16 -- and they all have brown hair. You can't say that any
 17 one person is more likely than another to be a donor to
 18 that blood stain.
 19 Now, let's say if we can do a little bit
 20 more. Let's say, "Well, I can" -- "I know that the person
 21 who contributed to this blood stain has brown hair and is
 22 left-handed." So you now look at your candidates, and you
 23 look at them and you say, "Well, three of them are left-

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1 handed and say two are right-handed." Well, the two who
 2 are right-handed are automatically eliminated, but you
 3 still can't distinguish between the other three because
 4 left-handedness and brown hair color are the same in all of
 5 them.

6 So that if you have a series of markers and
 7 they're identical in all the people that are being tested,
 8 then you can't really use that to try to distinguish the
 9 source of a given blood stain. You can only look to the
 10 differences, not to the similarities, because the question
 11 that is being asked here, the scientific question that is
 12 being asked is who could possibly be a biologic donor to
 13 this blood stain.

14 And, secondly, I don't know whether there's
 15 a single person or from a bunch of people. As I stated in
 16 my affidavit, is it a single source sample or many people
 17 are sources of the sample. So you have to look to the
 18 differences between individuals who you test rather than to
 19 their similarities.

20 Q Okay. The next general point you have in
 21 your affidavit is that where a type from a known possible
 22 donor of the blood matched the type from the blood
 23 discovered, it is not appropriate to include that type in

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1 calculating the frequency that the blood was deposited by a
 2 suspect. Now, you may have already gone through that
 3 somewhat. You have a specific example. That might be one
 4 where going through a specific example from the table or
 5 from your affidavit might be helpful to illustrate that
 6 point.

7 A Well, the -- again, the focus here is on the
 8 unknown sample, and if there are any similarities there
 9 between that blood sample and all of the people that are
 10 involved, even -- I mean suppose it's -- suppose it's
 11 something really --

12 Let's take another genetic typing you can
 13 sort of visualize. Let's suppose that the blood sample
 14 that you know came from somebody who has got brown hair, is
 15 left-handed, and is an albino, has no pigment color in
 16 their skin at all. Albinism is a very rare occurrence in
 17 the human population. It's very rare indeed. Now, at that
 18 point, the fact that you now have three individuals who are
 19 left-handed and have brown hair, but only one of them is an
 20 albino. You say that's a very rare event. It could only
 21 have been that person.

22 So you can now use that to reason backwards
 23 and say, "Alright, albinism is a very rare event, so I know

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1 that this blood stain came from an albino." That could
 2 only have occurred in one out of a very few number of
 3 people who have this inherited genetic trait.

4 That is separate from the question of
 5 saying, "How often is the combination of brown hair, left-
 6 handedness and albinism found in the general population?"
 7 That's a separate question. That's how often do I find
 8 these together in the general population. You can make
 9 that estimate as well. But that's a general question about
 10 the population. That is not a question about the sample.
 11 The only thing that distinguishes that sample is what is
 12 different about that sample than is in the known
 13 individuals that you're testing. So you've got a -- Those
 14 two things have to be kept separate.

15 And that's what I mean by this, that you
 16 can't take a combination of factors that are found in the
 17 general population and relate it to a specific sample. All
 18 you can say is that if these are present and I now have
 19 data to show that are indeed present, this is how often I
 20 would expect to find that combination of markers in the
 21 general population, providing they are behaving and acting
 22 independent of each other, because that's the other issue
 23 in terms of being able to do that, they have to be behaving

1 independently. They have to be what we say scientifically,
2 they sort independently.

3 Q I think the specific example that you have
4 in the affidavit, I'd like for you to go ahead and turn to
5 that one, as well.

6 A Uh-huh.

7 Q Well, you quoted the report where the
8 statement is made that, quote, "The combination of blood
9 groups O, PGM 1+1-1, AK 1, EAP BA, EsD 2-1, ADA 1,
10 GLO 1 2, Hp2-1, and Gc 1 occurs in approximately 0.03% of
11 the population." In connection with that statement, you
12 assert that the conclusion implies that all of the blood
13 typings obtained from the crime scene for these particular
14 items were the same as all the blood typings obtained from
15 Mr. Moss. And I wondered if you would give an example of
16 what you mean where you believe that that general
17 conclusion is inaccurate or overstates.

18 A Well, for example, there's an item called
19 flashlight.

20 Q Do you have the item number?

21 A It's item -- It doesn't have an item number,
22 it just says flashlight. It's on Table II. It continues
23 the last page of Deposition Exhibit No. 5.

1 "I would expect to find these series of markers in a
2 certain percentage in the population." But it relates to
3 the general population, it doesn't relate to the sample.
4 The sample is specific to the forensic situation that's
5 being investigated.

6 Q So is your point that the conclusions
7 reached should have been based upon the specific types
8 found from each particular item tested, as opposed to using
9 the general population figure and implicitly saying that
10 all those types were obtained from all the evidence?

11 A If that's -- If that was the intent, to
12 implicitly say that this is the type that was found on all
13 of these items, that would be incorrect. On the other
14 hand, those three items it would have been fair to make
15 this conclusion. But it wouldn't have been fair to make
16 that conclusion about the flashlight.

17 Q I think the next sort of general principle
18 that you talked about in your affidavit is that it is only
19 proper to combine the frequencies on types obtained from a
20 blood sample where results, in the absence of any other
21 data, are consistent with the blood sample coming from a
22 single source. And you follow that up with a statement
23 that -- Well, let's start with that statement. Why don't

1 Q Okay.

2 A There -- What it is is that there's -- It
3 just says PGM 1, so we don't know if it's 1+1- or 1+, 1-.
4 You know, there's three possibilities. It could be 1+, it
5 could be 1-, it could be 1+1-. So we don't know whether or
6 not the 1+1- is there or not. No result was contained
7 in -- was obtained Haptoglobin or Gc. That's Hp and Gc.
8 So to take this figure here and apply it to this sample
9 here is not -- implies that this combination of factors
10 here would be found in that.

11 Now, in contrast, I mean, if I didn't point
12 it out now, I'm sure someone would point it out to me,
13 there is one result here where there is a complete match
14 between Mr. Moss and a stain found at the crime scene.
15 That's item seven, the kitchen door curtain. And that's
16 also the case reported on the clothing of Bernadette
17 Reggett, which is the very last line of Table II, and
18 Christmas wrapping paper, which is the next to last -- is
19 the third to the last line of Table II.

20 Now, there -- The results are here reported
21 to match the types that are reported for Mr. Moss. So at
22 that particular point, if these results are indeed correct,
23 then at that point it is fair to do a calculation and say,

1 you -- Those two points, number 29 and 30 of the affidavit,
2 they may sort of relate to each other, but if would just
3 generally explain that idea.

4 A Well, I think in my previous direct
5 testimony I said that one of the inherent difficulties with
6 serological testing is there's no way to know whether or
7 not a blood sample is a mixture or a single source. The
8 only samples that you really know are truly single source
9 samples are the samples that are taken directly from
10 somebody be they alive or dead. You know where those come
11 from, so that that -- And there's no way, to my knowledge,
12 anyway, to, for example, decide whether or not a blood
13 stain is a single source sample. It's very difficult to
14 do.

15 Now, as I'm sure will be pointed out, if you
16 have series of markers, I couldn't say that it wasn't a
17 single source. I mean, for example, take item 7, the
18 kitchen door, I couldn't say that that's not a single
19 source, but I have no way of scientifically sorting that
20 out. It could be a mixture of a whole bunch of people, for
21 all I know. And there's no way to sort that out.

22 So I think that in describing the results of
23 testing, by this, I think that one has to be very cautious

1 about overstating what the meaning is of these kinds of
2 calculations. They are an accurate calculation. I don't
3 disagree with the 0.03%. My tables are a little different
4 than the ones they us, so it's probably -- I came up with
5 something like 0.05%. That certainly is close enough. As
6 far as I'm concerned, it's the same number.

7 But the -- I don't know that these are
8 single samples. And the other thing that I have to go back
9 to is, is that I have no way of verifying these really very
10 important data as they relate to this case.

11 Q Okay. Let me -- You've mentioned the
12 example of item number 7, the kitchen door curtain, and in
13 that example typings apparently were obtained in the --
14 Let's see. It looks like that's nine different groups that
15 were tested. In the table, the particular types in bold
16 are types that are similar to or identical to known blood
17 types from some of the other -- from some of the known
18 possible donors of blood in the Reggettz home. And I just
19 wanted to make sure I understand when you're talking about
20 calculating the frequency of this particular sample. Are
21 you saying that, for example, since the ABO for the kitchen
22 door curtain was found to be O, but there are known
23 possible donors in the Reggettz house who are O, that you

1 of the BA on this kitchen door stain, number 7. So that's
2 where they have that in common. The ones where they aren't
3 in common is the 1- is something -- no, the 1+ is the one
4 type that is not seen in anybody.

5 Q Okay. The PGM 1+ --

6 A PGM 1+ is a type not seen in anybody.

7 Q Okay. So you would use that?

8 A That's right.

9 Q And what else in item number 7 would you
10 use? I think it's kind of hard to tell what's bold and
11 what's not. It looks like the --

12 A Gc 1 --

13 Q Okay.

14 A -- because everybody in the Reggettz
15 household is 2-1.

16 Q Okay. So would --

17 A And Esterase D. Everybody in the Reggettz
18 household is a 1, this sample is a 2-1. So I don't know --
19 I can use the 2 as a distinguishing factor, but I can't
20 really use the 1. So the frequencies of each one of these
21 alleles is no. You know, we know how often the 1+ would be
22 found and how often the 2 would be found and how often the
23 1 would be found, and because they occur together, you have

1 should not include that particular typing in calculating
2 the population frequency for item number 7?

3 A Everybody in this case tested as type O
4 blood.

5 Q Yes.

6 A So as far as this is -- this marker is
7 concerned, this does not provide me any information about
8 that particular sample. So if I were doing this
9 calculation, I would not use the fact that approximately
10 forty percent of Caucasians are type O blood --

11 Q Okay.

12 A -- to this sample.

13 Q Right.

14 A I mean, I think I've stated before, I would
15 use it in saying how often would I expect to find this type
16 in combination with all the others in the general
17 population. That's a valid calculation. But with respect
18 to this sample, I would say, "What I'm going to look to is
19 I'm going to look to the differences," and say, "How often
20 would I expect to find that difference?" So, for example,
21 here is -- there's a place where the EAP is -- even there,
22 there still is a person in the Reggettz household who is
23 BA, so I'd have to consider that person as a possible donor

1 to look at the frequency of them as they occur together.
2 So you could actually use -- you would actually use the
3 frequency of 1+ or 2-1 and 1 here. But that would allow
4 you to say, "This unique set here is found in a certain
5 portion of the population." And that is specific to this
6 sample.

7 Q Okay. And it's a thing that's a good
8 example. I think the -- maybe the last general statement
9 in the affidavit is that -- and this may, again, repeat
10 something you've already said -- was that each of the types
11 found from each individual sample must be treated
12 separately rather than in conjunction with each other,
13 because it is not possible, scientifically, to link
14 together the types found from different blood samples.
15 Just to make sure I know what you're talking about, would
16 you explain that general idea?

17 A Well, if you have different blood samples,
18 different donors, you can't take the frequency of that
19 person's blood type and link it together with the frequency
20 of a person -- the second person's blood type. What you
21 can do is you can say, "Well, in the general population I
22 might find this combination in, say, three percent of the
23 population or I might find this other combination in, say,

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1 ten percent of the population." So at that particular
2 point you can extrapolate a little bit and say, "Well, that
3 probably represents thirteen percent of the total
4 population might have this combination of factors."

5 But that still isn't specific to the sample
6 in question. The sample in question is -- The
7 distinguishing factors about the sample in question is what
8 distinguishes it from the other -- all the individuals who
9 have been tested, and that's where the focus has to be.

10 Q Okay. You note in the affidavit that
11 there's no evidence as to when the blood stains were
12 deposited and what caused the blood to be deposited, and I
13 take it you agree that the serological typing is unable to
14 determine when a blood sample was deposited; is that
15 correct?

16 A I don't know of any method, serological,
17 DNA, that can tell you how old a stain -- a biological
18 stain is.

19 Q In paragraph 39 of your affidavit you state
20 that the only blood types of significance from any of the
21 samples are PGM, Gc, and EsD, and I wonder if you'd explain
22 why -- what's your basis for making that statement.

23 A Well, again, going back to Mr. Moss's type

1 testimony, testing is designed to exclude the person who is
2 not the true biologic donor of the stain.

3 Q I think that -- Let me see. You've already
4 gone over 41, 42, and 43 in your affidavit, and you've
5 already talked about there's no basis for assuming a single
6 source. Your final conclusion in your affidavit is that
7 based upon the foregoing analysis, the statistical
8 conclusions are overstated in this case. And again, I take
9 it, that relates back to some of the problems you've
10 already discussed, and I don't guess we need to go through
11 that again unless you have something to add to that.

12 A No, I don't have anything to add. It's -- I
13 think this affidavit may be a little bit repetitious in the
14 sense that I've stated some things several different ways,
15 but I have done that in an effort to clarify my opinion
16 that I have derived based on review of the test results in
17 this case.

18 Q The final paragraph in the affidavit is that
19 you generally concur with the statements concerning the
20 scientific data that are set out in the habeas corpus
21 petition on pages 29 through 36 without necessarily
22 adopting all the particular language used, that's correct?

23 A That's correct.

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1 and to taking item 7 as an example, those are the three
2 systems where that stain could be distinguished from people
3 in the Reggett house. There's PGM, the 1+1- is not found
4 in any of the people in the Reggett house. Even though
5 you find somebody with a 1 -- a 1-, you don't find anybody
6 there with a 1+. So the 1+ is what really distinguishes
7 the stain from -- in the PGM system and now you have 1+1-,
8 so you would have to deal with that as a combination. You
9 can't separate that out.

10 Esterase D, everybody in the Reggett house
11 is a 1, this sample has a 2-1, so that that 2 distinguishes
12 the Esterase D in this stain from everybody in the Reggett
13 house.

14 The Haptoglobin is -- Well, Gc, I'm sorry,
15 Gc, there's a 1 there. Everybody in the Reggett house has
16 a 2-1 in the Gc system, so if anybody -- and this, perhaps,
17 illustrates it very well -- if anybody in the Reggett
18 house had been a source of that stain, you would expect to
19 find a 2 present, as well, and you don't. So, you see,
20 that eliminates anybody in the Reggett house as a donor of
21 this particular stain. It doesn't tell you who is the
22 donor of that stain, it just eliminates them.

23 Again, it goes back to my previous

1 Q Maybe just as a final clean-up matter just
2 to make sure that it's clear in the record, when you --
3 when you go through -- when you went through your analysis
4 on, let's go back to item number 7, the kitchen door
5 curtain, and you talked about how you should focus on the
6 types that are different from the known possible donors,
7 and so you looked at the PGM, the EsD, and the Gc. And you
8 stated that you should focus on those differences. I
9 wonder if you'd explain -- and let's see if I can figure
10 out a way of saying this -- what is the -- I guess the
11 scientific problem with simply multiplying all of the
12 samples or all the population frequencies that were found
13 from item number 7 together, as opposed to simply focusing
14 on the differences.

15 A There's nothing wrong with doing that. All
16 that says is that I would -- when you did that calculation,
17 that would say, "This combination of factors would be
18 expected to be found in a certain portion of the
19 population," in this particular case using the number that
20 was calculated in this case, .03% of the population would
21 have that combination of factors. There's nothing wrong
22 with that.

23 The thing about it is, is before going to

1 that -- going ahead to make that calculation, one first has
2 to decide what distinguishes this stain from any other
3 stain that's present. And my point is, is that the PGM,
4 the Esterase D, and the Gc types are what distinguish this,
5 and I have to couple that with the scientific fact that I
6 have no way of telling whether or not this is a mixture of
7 a single stain or multiple donors to the stain. And this
8 would be true whether this was DNA testing or serological
9 testing.

10 All one can do is report the data as one
11 sees it and say, "This is how often I would expect to find
12 this combination of markers." It's a unique or it's not --
13 it's a rare combination or it's not very rare at all. It
14 would be like a verbal description of the scientific
15 result. But the -- But beyond that, it's really difficult
16 to say much more.

17 And at that point it's really up to
18 everybody else who is involved in looking at this evidence
19 to come to a decision as to how that stain could have
20 gotten there if, in fact, an individual is the donor of
21 that stain. All we can do is just say, "This is what the
22 scientific data said."

23 Q Would it be accurate to say that by giving

1 what I'll call the general population frequency number on
2 item number 7, that would essentially give you the number
3 that is the most discriminating number versus the
4 calculation you make by multiplying the population
5 frequencies of the types that are different. So in other
6 words, you would be providing the range, one includes
7 everything together, and I think implicitly --

8 A Yes.

9 Q -- it says it's a single source --

10 A Yes.

11 Q -- and the other is taking into account
12 well, this may be a mixed sample, but here is where these
13 three different types and what the population frequencies
14 would be there?

15 A And that could still be a very compelling
16 number.

17 Q Right.

18 A Even the range can be a very compelling
19 component.

20 Q And just so I also make it clear, are you
21 saying that the calculation method that you have discussed
22 here is what would have been appropriate, is it what would
23 have been mandatory, or how would you describe the

1 additional calculation that you've been talking to where
2 you focused on the differences in each sample?

3 A There isn't anything really mandatory in
4 doing this. It really is based on understanding how
5 genetic systems work and coupling that with the experience
6 of the forensic scientist who appreciates the nature of the
7 samples that are being studied. Population geneticists
8 never run into this problem. When you get a tube of blood,
9 you know it came from a single person, you do a typing on
10 that and you say, "Oh, this is a rare combination of
11 markers in this individual." There isn't any question
12 about where that sample came from.

13 A stain collected off a disorganized scene,
14 that are frequently what happens in a forensic situation,
15 at that point all we can do is test what is there, say,
16 "This is what I found. Here's a" -- If all of these
17 were -- all of these markers would be expected to be found
18 in a certain combination, these are the markers that
19 distinguish this stain from -- and make this person as a
20 possible donor of that stain.

21 For example, and one of the statements that
22 might be said about this is that -- and then allow the
23 individuals who are going to make decisions about this to

1 come to their own conclusions -- one might say that, for
2 example, on the stain on the kitchen door Mr. Moss couldn't
3 be excluded in the PGM, the Gc, and the Esterase D systems.
4 That just says where -- what distinguishes that sample from
5 all the others.

6 And then if you want to know what this
7 combination is, then you could go and say a combination of
8 1+ -- PGM 1+, EsD 2-1, and Gc 1 is a certain number, and
9 the combination of type O blood, PGM 1+2+, AK 1, BA, for
10 EAP 2-1, for EsD, ADA 1, 2 for GLO 1, 2-1 for Haptoglobin,
11 and Gc 1, that's found in three percent of the
12 population -- or .03% of the population.

13 And at that particular point the scientist
14 has done their job, presented you with the best possible
15 data that you can use, and at that point the decision is
16 now up to those people involved in the process who actually
17 have to make the next decision in relationship to what this
18 -- how this data is going to be used in the case being
19 tried.

20 Q Let me maybe just ask for clarification,
21 then, in the affidavit, just to make sure the record is
22 clear. And I'd ask you to look at paragraph 43 of your
23 affidavit, and maybe if you'd just read that to yourself

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1 and then --

2 A (Witness examines document.) Well, what

3 paragraph 43 says is it addresses the issue about I don't

4 know if these are mixtures or not, and there's no way I can

5 tell that.

6 Q And under --

7 A Under those circumstances, all I can say is

8 what distinguishes it and make a statement to that effect,

9 and then to the extent that that is helpful, the numbers

10 are helpful, one can sort of narrow down the range of

11 people who might be -- have that unique combination of

12 markers not shared by other people. And then beyond that,

13 one can also, accurately and without overstating the facts,

14 find out what a whole series of combination of markers

15 might be expected to be found in the general population.

16 But those are all separate items that have to be taken into

17 account in light of where that sample came from.

18 Q And then in paragraph 41, the way I read

19 that is that where you find the different types, you can

20 state the population frequency for those different types,

21 but you -- for statistical purposes, you should not

22 multiply them together. Just let me make sure I understand

23 here.

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1 A Not unless you know for sure that it's a

2 single source blood sample.

3 Q Okay. So when you were giving your general

4 example in item number 7, and let's say you found a

5 population frequency for the PGM type and for the Gc type,

6 you're saying that it would be appropriate to state those

7 particular population frequencies, but you should not

8 multiply them together unless you know for a fact that

9 there's a single source?

10 A With respect to that sample, that specific

11 sample, you really don't know. You don't know. I mean you

12 can calculate things, but to -- but to say that I could say

13 with certainty about this sample, that this is a single --

14 that this combination of factors is what's -- this is how

15 often I'm going to find this combination of factors, you

16 have to also be able to state with an equal amount of

17 certainty that it's also a single source sample. And

18 that's the problem with all forensic testing.

19 MR. SIMMONS: I think that's all the

20 questions I have.

21 EXAMINATION

22 BY MS. KERSHNER:

23 Q Doctor Bing, your testimony on direct was

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1 that it's -- that except where you are certain that you

2 have a single source on a blood sample, such as taking a

3 known blood sample from a suspect, there you know that

4 you've got a single source donor, correct?

5 A (Witness nods affirmatively.)

6 Q But that under other circumstances where

7 evidence is collected like at a crime scene, that you

8 cannot be certain that it's a single source donor, is that

9 correct?

10 A These are -- Yes, these are stains, stains

11 collected at a crime scene, as opposed to something that's

12 taken from an individual, for example, a blood sample, a

13 cell sample, a swab, something like that where you actually

14 know where it came from.

15 Q If a person who has some expertise in

16 serology, however, has collected the stains or examined the

17 stains in some fashion at the crime scene or immediately

18 afterwards, is there any way that, in addition to typing of

19 the blood, the general condition of the stain could

20 indicate whether it's a single source or possibly a

21 multiple source?

22 A Well, I'm not a crime scene investigator,

23 but as I understand it, there are ways to, in terms of

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1 looking at splatter patterns of blood, for example, if a

2 blood stain is found in and around a victim that's lying on

3 the floor or something like that, people who have spent a

4 lot of time investigating crime scenes would probably

5 testify to the fact that it would be inconsistent with all

6 their experience that this could have come from anything

7 but a single individual. But a stain -- But the whole

8 scene has to be looked at together from that point of view.

9 It literally requires a great deal of experience and

10 expertise. There are people who can do that. There are

11 people who know how to do that.

12 Q Now, where there is a mixture or a suspected

13 mixture of blood, such as at a crime scene, on clothing or

14 other exhibits from a crime scene, would it be normal,

15 where there is a mixture or a suspected mixture, to find a

16 different intensity in the banding? For example, if

17 there's an A, the victim is type A, the suspect is type B,

18 and where -- the area where you're testing shows both A and

19 B, would you then be able to conclude that there was a

20 mixture?

21 A In serological testing that's not of the

22 one -- it's my understanding it's not one of the criteria

23 by which the test is set up. Certainly I would be the last

1 person to deny that an experienced serologist, if they had
2 had a lot of experience in dealing with mixtures, and they
3 have accumulated experience in that area, they could
4 probably testify to that, based on their experience, this
5 looked to them like a mixture. I would accept that.

6 But, you know, at least to my knowledge, the
7 procedures that describe, for example, how EAP or Esterase
8 D is done, mixtures would be very hard to pick out, would
9 be very hard to pick out. With Haptoglobin and Gc, those
10 are systems with which I'm very familiar. Minor types are
11 not often interpreted as a result of being a mixture,
12 because even in a single source sample, sometimes you will
13 pick up a minor type just because of the nature of these
14 systems.

15 Q You also testified about the lack of
16 protocol at the laboratory -- lack of written protocol at
17 the West Virginia State Police Serology Laboratory in 1979.
18 But at that time, was it usual for a laboratory of that
19 type, in other words, a state run laboratory, forensic-type
20 laboratory, was it usual for that laboratory to have
21 written protocols?

22 A I truly have no specific knowledge about
23 forensic testing because I really didn't start doing this

1 until around 1989, 1990. And protocols were just something
2 that I always had, so it was a surprise to me to hear from
3 people in the field that this was not an uncommon practice
4 in certain laboratories. But I have no specific knowledge
5 about what was generally practiced in the field at that
6 time. I mean I do have documented the FBI had a written
7 protocol in 1974, and it's actually a very useful protocol
8 because it has a lot of the original development of these
9 systems, which from a scholarly point of view, is a very
10 useful piece of paper.

11 MS. KERSHNER: I have nothing further.

12 MR. SIMMONS: Okay. I don't have any
13 follow-up questions. The court reporter needs to hear you
14 waive your signature, if you so desire, or not waive.

15 THE WITNESS: I waive my signature.

16 (WITNESS STANDS ASIDE.)

17 (WHEREUPON, the deposition was
18 concluded at 3:00 o'clock p.m.)

REPORTER'S CERTIFICATE

STATE OF WEST VIRGINIA,

COUNTY OF KANAWHA, to-wit:

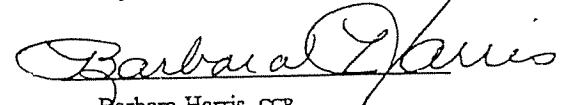
I, Barbara Harris, Notary Public within and for
the State of West Virginia, duly commissioned and
qualified, do hereby certify that the foregoing deposition
of DAVID H. BING was duly taken by and before me, under the
West Virginia Rules of Civil Procedure, at the time and
place and for the purpose specified in the caption thereof;
the said witness having been duly sworn by me to testify
the whole truth and nothing but the truth concerning the
matter in controversy.

I do certify that the said deposition was
correctly taken by me by means of the Stenomask; that the
same was transcribed under my supervision, and that the
said transcript is a true record of the testimony given by
said witness.

I further certify that I am not connected by
blood or marriage with any of the parties to this action,
am not a relative or employee or attorney or counsel of any
of the parties, nor am I a relative or employee of such
attorney or counsel, or financially interested in the
action, or interested, directly or indirectly, in the
matter in controversy.

It is stipulated and agreed that the signature of
the witness is hereby expressly waived to the foregoing
deposition.

Given under my hand this 16th day of June, 1995.



Barbara Harris, CCR
Notary Public

My commission expires August 30, 2003.

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IN THE CIRCUIT COURT OF KANAWHA COUNTY, WEST VIRGINIA

JOHN MOSS, III,

Petitioner,

vs.

CIVIL ACTION NO. 94-MISC-663

GEORGE TRENT, Warden of the
West Virginia State Penitentiary,

Respondent.

COPY

The deposition of ROBERT MURPHY was taken on the 17th day of May, 1995, beginning at 10:10 a.m., in the Law Offices of DiTrapano & Jackson, 604 Virginia Street, East, Charleston, Kanawha County, West Virginia, before Penny L. Kerns, Notary Public and Certified Court Reporter, for purposes of discovery and/or to be read as evidence in the above-styled matter which is now pending and undetermined in said Court.

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I N D E X

<u>Witness</u>	<u>Examination by</u>	
	<u>Mr. Simmons</u>	<u>Ms. Kershner</u>
Robert Murphy	3	53

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